

Xenoy* Resin 1103

Americas: COMMERCIAL

AUTOMOTIVE. Unreinforced, impact modified PBT+PC alloy. Excellent low temperature impact and chemical resistance. Range gray, black colors.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	51	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	50	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D 638
Tensile Modulus, 50 mm/min	1890	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	77	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1930	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	747	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	61	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	125	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	104	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.71E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.E-04	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.8 - 1	%	SABIC Method
Melt Flow Rate, 250°C/5.0 kgf	13	g/10 min	ASTM D 1238



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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	110	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 275	°C
Nozzle Temperature	250 - 265	°C
Front - Zone 3 Temperature	250 - 270	°C
Middle - Zone 2 Temperature	245 - 265	°C
Rear - Zone 1 Temperature	240 - 260	°C
Mold Temperature	40 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 80	rpm
Shot to Cylinder Size	50 - 80	%
Vent Depth	0.013 - 0.02	mm

